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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,074	02/19/2004	Michele C. Clayton	P17730	2852
46915 7590 08/08/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: INT77 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER ZHOU, YONG	
			ART UNIT 2609	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/787,074

Applicant(s)

CLAYTON, MICHELE C.

Examiner

Yong Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/9/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/27/2005, 7/22/2005,10/14/2005, 12/06/2006 .

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The figure number on page 9, line 29, of the specification is printed as Fig. 8. It is believed to be Fig. 9. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 11-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Kracht (US Patent No. 6,377,987).

For claims 1, 11, 19 and 22, Kracht teaches operations of:

generating topology information including information on local interfaces in a device and remote interfaces in at least one remote device that connect to the local interfaces identified in the topology information (col. 3, lines 52-57);

for each connected remote interface, determining a device type of the one remote device including the remote interface (col. 5, lines 29-30); and

for each local interface connecting to one remote interface in one remote device of a specified device type, initiating communication with the remote interface to access remote topology information from the remote device indicating devices attached directly and indirectly to the remote device (col. 4, lines 8-9).

For claims 11 and 19, Kracht further teaches a system in communication with at least one remote device, wherein each remote device includes at least one remote interface and remote topology information, comprising:

at least one local interface (Fig. 10, #1020);

circuitry integrated with the motherboard capable of causing operations (of method 1) to be performed (col. 18, lines 11-13);

For claim 19, Kracht further teaches a motherboard (computer system, Fig 10, #1000).

For claims 2, 12, 20 and 23, Kracht teaches all limitations of claims 1, 11, 19 and 22. Kracht further teaches merging the topology information with the remote topology information (col. 17, lines 26-27).

For claims 3, 13, 21 and 24, Kracht teaches all limitations of claims 1, 11, 19 and 22. Kracht further teaches that the specified device type comprise an expander (hub or switch, col. 8, lines 10-11).

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For claim 4, Kracht teaches all limitations of claim 1. Kracht further teaches operations:

receiving at the remote device a request for the remote topology information from the device (col. 10, lines 35-39);

determining at the remote device whether the remote topology information is completed (col. 11, lines 10-11); and

transmitting the remote topology information to the device in response to determining that the remote topology information is completed (col. 10, lines 35-39).

Claim 27 is rejected for the same reasons as Claim 4.

For claim 16, Kracht teaches all operations as in claim 4. Kracht further teaches a system in communication with at least one remote device and one upstream device, wherein each remote device includes at least one remote interface and remote topology information, comprising:

at least one local interface (Fig. 10, #1020);

circuitry capable of causing operations to be performed (col. 18, lines 11-13).

For claim 5, 17 and 28 Kracht teaches all limitations of claims 4, 16 and 27. Kracht further teaches the method of claim 4, wherein the remote topology information is completed if the remote topology information indicates information on devices to which the remote device is directly and indirectly connected (col. 3, lines 64-66).

For claims 6, 18 and claims 29, Kracht teaches the all the limitations of claims 5, 16 and 27. Kracht further teaches that the remote topology information is completed in response to completing:

determining the device type of at least one additional device to which the remote device connects (col. 5, lines 29-30);

receiving additional topology information from the at least one additional device to which the remote device connects that is of the specified device type (col. 11, lines 7-10); and

merging the received additional topology information with the remote topology information (col. 17, lines 26-27).

For claim 7, Kracht teaches all limitations of claims 1. Kracht further teaches that the topology information and remote topology information include information on downstream devices (col. 3, lines 64-66).

For claim 8, Kracht teaches all limitations of claim 7. Kracht further teaches that one downstream device comprises an end device or an expander (hub or switch, col. 8, lines 10-11) providing a direct or indirect connection to further end devices that may be connected to through the downstream expander (Fig. 8).

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For claims 9, 15 and 26, Kracht teaches all limitations of claims 1, 11 and 22. Kracht further teaches that the topology information includes an entry for devices to which the device including the completed topology information connects directly or indirectly, wherein each entry indicates a first address and first interface of a first device, a second address and second interface of a second device connected directly to the first device, and a device type of the second device, wherein the device including the topology information connects directly or indirectly to all first and second devices identified in the topology information (Fig. 7, #746, #748, #750) .

Claims 14 and 25 have the same limitations as those included in claim 8.

Therefore, they are rejected for the same reason as for claim 8.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kracht in view of Robert Elliott (editor) ("Information Technology – Serial Attached SCSI (SAS)", Project T10/1562-D, Revision 5, July 9, 2003), hereinafter referred to as Elliott.

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For claim 10, Kracht teaches all limitations of claim 1.

Kracht does not specifically teach that the devices comprise SAS devices and wherein the interfaces comprise SAS PHYs, and wherein each device in the topology has a unique SAS address.

Elliott teaches that the devices comprise SAS devices (p. 10, sec. 3.1.107, 1st line and wherein the interfaces comprise SAS PHYs (p. 10, sec. 3.1.112, 1st line), and wherein each device in the topology has a unique SAS address (p. 10, sec. 3.1.106, 1st line).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the device in Kracht with SAS device taught by Elliott to achieve the predictable result of identifying devices in network topology.

Conclusion

6. Any response to this Office Action should be **faxed** to (571) 273-8300 Or **mailed** to:

Commissioner for Patents,
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314


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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Zhou whose telephone number is (571) 270-3451. The examiner can normally be reached on Monday - Friday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yong Zhou
Patent Examiner
AU 2609
August 2, 2007


BENNY Q. TIEU
SPE/TRAINER